

WHAT IS CLAIMED IS:

1. An information processing apparatus for distributing image formation control software via a network, comprising:

receiving means for receiving consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from external equipment capable of communicating data via the network; and software distributing means for distributing image formation control software to said external equipment depending on the consumable-unit information via the network.

2. An information processing apparatus according to Claim 1, further comprising:

storage means for storing plural kinds of image formation control software depending on the consumable-unit information received by said receiving means; and

deciding means for retrieving and deciding predetermined image formation control software depending on the consumable-unit information received by said receiving means,

wherein said software distributing means distributes the predetermined image formation control software decided by said deciding means to said external equipment via the

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network.

3. An information processing apparatus according to Claim 2, wherein the consumable-unit information is information for specifying a production lot number of said consumable unit; said storage means stores optimum image formation control software corresponding to the production lot number; said deciding means retrieves and decides the image formation control software corresponding to the production lot number based on the consumable-unit information; and said software distributing means distributes the image formation control software decided by said deciding means corresponding to the production lot number to said external equipment via the network.

4. An information processing apparatus according to Claim 3, wherein said storage means stores optimum image formation control software depending on combinations of production lots of respective parts making up said consumable unit corresponding to the consumable-unit information; said deciding means retrieves and decides the image formation control software corresponding to a combination of the production lots of said consumable unit based on the consumable-unit information; and said software distributing means distributes the image formation control

software decided by said deciding means corresponding to the combination of the production lots to said external equipment via the network.

5. An information processing apparatus according to Claim 2, further comprising:

collecting means for collecting operating information of said image forming apparatus or said consumable unit via said network; and

selecting means for selecting, from among plural pieces of image formation control software stored in said storage means and corresponding to a predetermined production lot number, predetermined image formation control software depending on the operating information collected by said collecting means,

wherein said software distributing means distributes the predetermined image formation control software selected by said selecting means via the network.

6. An information processing apparatus according to Claim 1, wherein said consumable unit includes at least a photoconductor, a charging roller, or a toner used in said image forming apparatus.

7. An information processing apparatus according to

Claim 1, further comprising:

recognizing means for recognizing that said consumable unit is a photoconductor and the consumable-unit information is a production lot number of said photoconductor,

wherein said software distributing means distributes, via the network, software for instructing said image forming apparatus to control a light amount irradiated to said photoconductor.

8. An information processing apparatus according to Claim 1, wherein said receiving means further receives image forming apparatus identifying information for identifying said image forming apparatus; said deciding means decides predetermined image formation control software depending on the image forming apparatus identifying information and the consumable-unit information; and the consumable-unit information contains information for specifying a type of said consumable unit.

9. An information processing apparatus comprising:  
transmitting means for transmitting consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, to an image-formation control software distribution server capable of communicating data via a network; and

receiving means for receiving, via the network, image formation control software decided by and transmitted from said distribution server depending on the consumable-unit information.

10. An information processing apparatus according to Claim 9, further comprising:

recognizing means for recognizing the consumable-unit information regarding the consumable unit detachably loaded in said image forming apparatus;

determining means for determining whether the consumable-unit information recognized by said recognizing means is changed from consumable-unit information stored in a predetermined storage unit; and

control means for making control to display a prompt for updating the image formation control software when said determining means determines that the consumable-unit information is changed.

11. An information processing apparatus according to Claim 9 or 10, further comprising:

setting control means for executing installation of the image formation control software received by said receiving means;

print processing means for executing print processing

on a predetermined recording medium; and

determining means for determining whether the print processing is being executed by said print processing means,

wherein said setting control means executes installation of the image formation control software in response to a determination result made by said determining means.

12. An image-formation control software distributing system made up of a first information processing apparatus for distributing image formation control software via a network, and a second information processing apparatus capable of executing communication with said first information processing apparatus, the system comprising:

receiving means for receiving consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from said second information processing apparatus capable of communicating data via the network; and

software distributing means for distributing image formation control software to said first information processing apparatus depending on the consumable-unit information via the network.

13. An information processing method for distributing

image formation control software via a network, comprising the steps of:

a receiving step of receiving consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from external equipment capable of communicating data via the network; and

a software distributing step of distributing image formation control software to said external equipment depending on the consumable-unit information via the network.

14. An information processing method according to Claim 13, further comprising:

a storage control step of storing plural kinds of image formation control software depending on the consumable-unit information received by said receiving means; and

a deciding step of retrieving and deciding predetermined image formation control software depending on the consumable-unit information received in said receiving step,

wherein said software distributing step distributes the predetermined image formation control software decided in said deciding step to said external equipment via the network.

15. An information processing method according to

Claim 14, wherein the consumable-unit information is information for specifying a production lot number of said consumable unit; said storage control step stores optimum image formation control software corresponding to the production lot number; said deciding step retrieves and decides the image formation control software corresponding to the production lot number based on the consumable-unit information; and said software distributing step distributes the image formation control software decided in said deciding step corresponding to the production lot number to said external equipment via the network.

16. An information processing method according to Claim 15, wherein said storage control step stores optimum image formation control software depending on combinations of production lots of respective parts making up said consumable unit corresponding to the consumable-unit information; said deciding step retrieves and decides the image formation control software corresponding to a combination of the production lots of said consumable unit based on the consumable-unit information; and said software distributing step distributes the image formation control software decided in said deciding step corresponding to the combination of the production lots to said external equipment via the network.



17. An information processing method according to Claim 14, further comprising:

a collecting step of collecting operating information of said image forming apparatus or said consumable unit via said network; and

a selecting step for selecting, from among plural pieces of image formation control software stored in said storage control step and corresponding to a predetermined production lot number, predetermined image formation control software depending on the operating information collected in said collecting step,

wherein said software distributing step distributes the predetermined image formation control software selected in said selecting step via the network.

18. An information processing method according to Claim 13, wherein said consumable unit includes at least a photoconductor, a charging roller, or a toner used in said image forming apparatus.

19. An information processing method according to Claim 13, further comprising:

a recognizing step of recognizing that said consumable unit is a photoconductor and the consumable-unit information

is a production lot number of said photoconductor,

wherein said software distributing step distributes, via the network, software for instructing said image forming apparatus to control a light amount irradiated to said photoconductor.

20. An information processing method according to Claim 13, wherein said receiving step further receives image forming apparatus identifying information for identifying said image forming apparatus; said deciding step decides predetermined image formation control software depending on the image forming apparatus identifying information and the consumable-unit information; and the consumable-unit information contains information for specifying a type of said consumable unit.

21. An information processing method comprising:  
a transmitting step of transmitting consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, to an image-formation control software distribution server capable of communicating data via a network; and

a receiving step of receiving, via the network, image formation control software decided by and transmitted from said distribution server depending on the consumable-unit

information.

22. An information processing method according to Claim 21, further comprising:

a recognizing step of recognizing the consumable-unit information regarding the consumable unit detachably loaded in said image forming apparatus;

a determining step of determining whether the consumable-unit information recognized in said recognizing step is changed from consumable-unit information stored in a predetermined storage unit; and

a control step of making control to display a prompt for updating the image formation control software when said determining step determines that the consumable-unit information is changed.

23. An information processing method according to Claim 21 or 22, further comprising:

a setting control step of executing installation of the image formation control software received in said receiving step;

a print processing step of executing print processing on a predetermined recording medium; and

a determining step of determining whether the print processing is being executed in said print processing step,

wherein said setting control step executes installation of the image formation control software in response to a determination result made in said determining step.

24. An information processing method for use in an image-formation control software distributing system made up of a first information processing apparatus for distributing image formation control software via a network, and a second information processing apparatus capable of executing communication with said first information processing apparatus, the method comprising the steps of:

a receiving step of receiving consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from said second information processing apparatus capable of communicating data via the network; and

a software distributing step of distributing image formation control software to said first information processing apparatus depending on the consumable-unit information via the network.

25. A program executed by an information processing apparatus for distributing image formation control software via a network, the program comprising the steps of:

a receiving step of receiving consumable-unit

information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from external equipment capable of communicating data via the network; and  
a software distributing step of distributing image formation control software to said external equipment depending on the consumable-unit information via the network.

26. A program according to Claim 25, further comprising:

a storage control step of storing plural kinds of image formation control software depending on the consumable-unit information received by said receiving means; and

a deciding step of retrieving and deciding predetermined image formation control software depending on the consumable-unit information received in said receiving step,

wherein said software distributing step distributes the predetermined image formation control software decided in said deciding step to said external equipment via the network.

27. A program according to Claim 26, wherein the consumable-unit information is information for specifying a production lot number of said consumable unit; said storage control step stores optimum image formation control software

corresponding to the production lot number; said deciding step retrieves and decides the image formation control software corresponding to the production lot number based on the consumable-unit information; and said software distributing step distributes the image formation control software decided in said deciding step corresponding to the production lot number to said external equipment via the network.

28. A program according to Claim 27, wherein said storage control step stores optimum image formation control software depending on combinations of production lots of respective parts making up said consumable unit corresponding to the consumable-unit information; said deciding step retrieves and decides the image formation control software corresponding to a combination of the production lots of said consumable unit based on the consumable-unit information; and said software distributing step distributes the image formation control software decided in said deciding step corresponding to the combination of the production lots to said external equipment via the network.

29. A program according to Claim 26, further comprising:

a collecting step of collecting operating information of said image forming apparatus or said consumable unit via said network; and

a selecting step for selecting, from among plural pieces of image formation control software stored in said storage control step and corresponding to a predetermined production lot number, predetermined image formation control software depending on the operating information collected in said collecting step,

wherein said software distributing step distributes the predetermined image formation control software selected in said selecting step via the network.

30. A program according to Claim 25, wherein said consumable unit includes at least a photoconductor, a charging roller, or a toner used in said image forming apparatus.

31. A program according to Claim 25, further comprising:

a recognizing step of recognizing that said consumable unit is a photoconductor and the consumable-unit information is a production lot number of said photoconductor,

wherein said software distributing step distributes, via the network, software for instructing said image forming

apparatus to control a light amount irradiated to said photoconductor.

32. A program according to Claim 25, wherein said receiving step further receives image forming apparatus identifying information for identifying said image forming apparatus; said deciding step decides predetermined image formation control software depending on the image forming apparatus identifying information and the consumable-unit information; and the consumable-unit information contains information for specifying a type of said consumable unit.

33. A program for instructing an information processing apparatus to execute the steps of:

a transmitting step of transmitting consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, to an image-formation control software distribution server capable of communicating data via a network; and

a receiving step of receiving, via the network, image formation control software decided by and transmitted from said distribution server depending on the consumable-unit information.

34. A program according to Claim 33, the program



instructing said information processing apparatus to further execute the steps of:

a recognizing step of recognizing the consumable-unit information regarding the consumable unit detachably loaded in said image forming apparatus;

a determining step of determining whether the consumable-unit information recognized in said recognizing step is changed from consumable-unit information stored in a predetermined storage unit; and

a control step of making control to display a prompt for updating the image formation control software when said determining step determines that the consumable-unit information is changed.

35. A program according to Claim 33 or 34, the program instructing said information processing apparatus to further execute the steps of:

a setting control step of executing installation of the image formation control software received in said receiving step;

a print processing step of executing print processing on a predetermined recording medium; and

a determining step of determining whether the print processing is being executed in said print processing step, wherein said setting control step executes installation

of the image formation control software in response to a determination result made in said determining step.

36. A program executed by an image-formation control software distributing system made up of a first information processing apparatus for distributing image formation control software via a network, and a second information processing apparatus capable of executing communication with said first information processing apparatus, the program comprising the steps of:

a receiving step of receiving consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from said second information processing apparatus capable of communicating data via the network; and

a software distributing step of distributing image formation control software to said first information processing apparatus depending on the consumable-unit information via the network.

37. A storage medium product storing, in computer-readable form, program code for distributing image formation control software via a network, the program code comprising the steps of:

a receiving step of receiving consumable-unit

information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from external equipment capable of communicating data via the network; and a software distributing step of distributing image formation control software to said external equipment depending on the consumable-unit information via the network.

38. A storage medium product storing program code in computer-readable form, the program code comprising the steps of:

a transmitting step of transmitting consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, to an image-formation control software distribution server capable of communicating data via a network; and

a receiving step of receiving, via the network, image formation control software decided by and transmitted from said distribution server depending on the consumable-unit information.

39. A storage medium product storing, in computer-readable form, program code for executing an information processing method by an image-formation control software distributing system made up of a first information processing apparatus for distributing image formation

control software via a network, and a second information processing apparatus capable of executing communication with said first information processing apparatus, the program code comprising the steps of:

a receiving step of receiving consumable-unit information regarding a consumable unit, which is detachably loaded in an image forming apparatus, from said second information processing apparatus capable of communicating data via the network; and

a software distributing step of distributing image formation control software to said first information processing apparatus depending on the consumable-unit information via the network.

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